

EP-724316

The microlaser includes a concave entrance micro-mirror (20) on the surface of an active medium (24) and it is traversed by a pumping beam (34). The second principal mirror (26) may be a planar or concave micromirror on the exit surface of the second medium (28). The cavities are optically stable by making the radius of curvature greater than the length of the respective cavity or cavities.

- The second medium has an electro-optic or magneto-optic variable refractive index. Alternatively the refractive index may vary with the laser intensity or depend on temperature or pressure. The radius of curvature of the concave mirror exceeds 1.5 mm, the laser beam diameter (ϕ) is several tens of micrometres and the overall thickness is between 100 and 500 micrometres.

- USE/ADVANTAGE - Automotive industry, environment, telemetry and microelectronics. Reduced size and increased reliability. Microlaser is monolithic to permit realisation of device at low cost. (Dwg.4/7)